ABSTRACT

Fuel injection system of the common rail type provided with a high-pressure pump, which supplies fuel to a common channel that in turn supplies a series of injectors, and with a control unit, which is capable of keeping the pressure of the fuel within the common channel, moment by moment, equal to a desired value that generally varies over time; the control unit is coupled to a device for regulating the flow rate of the high-pressure pump in order to control the flow rate of the high-pressure pump so as to supply the common channel, moment by moment, with the amount of fuel required in order to have the desired value for pressure inside said common channel.